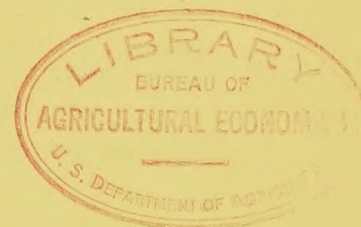


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FARM-MANAGEMENT EXTENSION SUMMARY OF ANNUAL REPORTS
for the
NORTH CENTRAL STATES
1938

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FOREWORD

This summary of the Farm-Management Extension work as carried in the North Central States in 1938 has been prepared not only to provide a record of work done, but also to give something of a perspective, for the benefit of all extension workers in the field, of the different types of educational methods being employed. It should be noted that this report attempts to cover only that phase of the economics extension program which could be classed as farm management or is very closely related thereto. No attempt has been made to include all the economics extension work done by farm-management specialists. It should be recognized, also, that obviously not all specific examples of worthwhile work being successfully developed could be reported. Many other examples of excellent work could be cited for each particular phase illustrated. Rather, the attempt has been made to present a composite picture which would present a fair cross section of the farm-management extension work in the area. Credit is due the State extension specialists from whose annual reports much of the material included herein has been drawn.

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FARM MANAGEMENT EXTENSION SUMMARY OF ANNUAL REPORTS

for the

North Central States, 1938

THE AGRICULTURAL SITUATION

The 12 Central States of the United States cover a land area of nearly a half-billion acres (483,902,252) or three-fourths of a million square miles (756,097). This constitutes one-fourth of the total land area of the United States (25.4 pct.).

However, located on this one-fourth of the land area of the 48 States there are approximately one-third of the Nation's farms (33 pct.) and over one-half of the Nation's crop acres (53 pct.)/1. During recent years (1927-36)/2 this area produced 72 percent of the Nation's corn crop, 60 percent of the wheat, and 36 percent of the total potato crop - three important food crops. The farmers of this area possessed an average of 63 percent of the Nation's hogs, 45 percent of the cattle, 27 percent of the sheep, and 47 percent of the poultry on January 1 for the 3-year period 1937-39. From the standpoint of total commercial production of livestock products, these livestock data very much understate this area's contribution to the Nation's supply of livestock products. In 1937 and 1938 these States produced an average of 52 percent of the Nation's milk supply.

Summarized in another way, the farms of these 12 States, although involving only one-fourth of the Nation's land area, included one-third of the total number of farms, one-half of the crop acres, supported three-tenths of the Nation's farm population/1, and was the source of 41 percent/3 of the total United States gross farm income during 1937 and 1938.

1/ U. S. Bureau of the Census. U. S. census of agriculture: 1935, v. 1, 951 pp. Washington, D. C., 1936.

2/ U. S. Department of Agriculture, Bureau of Agricultural Economics. General crop report: December 1938. 74 pp. Washington, D. C., 1938. Mimeographed.

U. S. Department of Agriculture, Bureau of Agricultural Economics, Livestock report: January 1, 1939. 14 pp. Washington, D. C., 1939. Mimeographed.

3/ U. S. Department of Agriculture, Bureau of Agricultural Economics. Gross farm income and Government payments in 1938 are estimated at \$9,220,000,000. 21 pp. Washington, D. C., 1939. Mimeographed.

A Highly Productive Area

The relatively large proportion of our total agricultural production accounted for by this area is directly related to the highly favorable physical and climatological conditions prevailing there. In most of the area, climatic conditions are conducive to a stable and diversified agriculture. The area is characterized from the physical standpoint by vast expanses of level country adapted to the use of power and large-scale farm equipment and by soils of inherently high productivity.

According to a soil-rating classification⁴ essentially based on inherent productivity, it is found that these States include 90 percent of the Nation's grade I land, 55 percent of grade II, 32 percent of grade III, and only 24 and 9 percent, respectively, of grades IV and V. Expressed in another way, 19 percent of the land of the area has been rated as excellent for the production of the staple crops climatically adapted to production in this region, 24 percent as good, 23 percent as fair, with only 18 percent rated as poor and 16 percent as essentially incapable of tillage. When these percentages are compared with the average percentages for the United States as a whole (United States averages: Grade I, 5.3 pct.; grade II, 11.1 pct.; grade III, 18.1 pct.; grade IV, 19.1 pct.; grade V, 46.4 pct.) it is obvious that this area has a decided advantage over most other sections in the adaptability of the land for agricultural purposes, and that conditions are such as to induce the development of a commercial type of agriculture.

Commercial Type of Agriculture Predominates

Although inadequate as a basis for drawing arbitrary conclusions as to the degree of commercialization of agriculture in the area, it is significant, nevertheless, that there were only 20, 17, and 22 percent of the farms of the area reported in the censuses of 1910, 1930, and 1935 that were less than 50 acres in size, and less than 5 percent of the farms were classified as "self-sufficing" in the census of 1930. These small farms, moreover, are concentrated largely in the semi-industrial States of the eastern Corn Belt, where a greater degree of opportunity exists for specializing in that type of agricultural production which does not demand large acreages such as poultry, small fruits, and vegetables. Likewise in such areas there are greater opportunities for supplementing agricultural income with income from nonagricultural sources. The one outstanding exception to these last two generalizations is found in Missouri where there were 61,890 farms of less than 50 acres listed in the 1930 Census, or 17 percent of the total for the 12 States. Also Missouri had approximately one-fourth (25.6 pct.) of all the so-called self-sufficing farms reported in these 12 States by the same census.

Table 1 indicates the distribution of farms less than 50 acres in size by major geographical regions of the United States, as reported in the

⁴/ U. S. National Resources Board. A report on national planning and public works in relation to natural resources. Part II. Report of the land-planning committee, p. 127. Washington, D. C., 1934.

1935 United States Census. It is obvious that the North Central States area has relatively a much smaller number of small farms than any other major section of the country.

Table 1.--Distribution of farms less than 50 acres in size by geographical areas, 1935 U. S. Census

Area	Total farms, all sizes	Farms of less than 50 acres	Farms of less than 50 acres
	Number	Number	Percent
New England.....	158,241	66,661	42.1
Middle Atlantic.....	397,684	142,296	35.8
South Atlantic.....	1,147,133	578,051	50.4
East South Central.....	1,137,219	663,671	58.4
West South Central.....	1,137,571	492,927	43.3
Mountain.....	271,392	80,372	29.6
Pacific.....	299,567	181,162	60.5
East North Central.....	1,083,687	300,461	27.7
West North Central.....	1,179,856	188,825	16.0
North Central.....	2,263,543	489,286	21.6

Further evidence as to the commercial nature of agriculture in this area is the fact that the average value of farm products sold, traded, or used by the operator's family per farm reporting was \$2,343 in these 12 States in 1929 as contrasted with \$1,835 for the United States as a whole. Of these amounts the North Central States farm families used 11.8 percent of this production in the home as compared with 13.6 percent as an average for all farms.

High Degree of Diversity Prevails

As a result of the wide diversity of opportunity available to farmers of the area, not only from the standpoint of natural characteristics of the area but also because of the well-developed transportation systems, prevalence of industrial centers, and the like, the agriculture of this section is, and likely will continue to be, highly diversified. Opportunities for diversification are not so great in some sections of the area as in others, but even in the less-favored sections certain opportunities do exist.

According to the 1930 Census, wherein farms are classified according to type, over one-fourth of all the farms of the area had no one source of income providing 40 percent or more of the total farm income. Only 19 percent of the farms derived 40 percent or more of the total farm income from cattle, hogs, and sheep, or wool and mohair; 16 percent derived 40 percent or more from the dairy enterprise; and 16 percent derived an equivalent percentage from cash grain. The remaining farms classified fell into eight other groups. The general observation can be made that a large percentage of those farms classified in a particular specialized class derived a large share of their total income from enterprises other than the special one

determining the particular classification. It is also worth noting that the value of total production on these different types of farms (excluding

Table 2.--Distribution of farms by type in North Central States and related items, 1930 U. S. Census

Types of farms	Farms	Area total	Value of farm products used by operator's family (farms re- porting)	Proportion of farm products used by operator's family (farms re- porting)	Value of farm prod- ucts sold, traded or used by operator's family (farms re- porting)	Value farm products per farm in percent- age of 12-State average
	No.	Pct.	Dollars	Percent	Dollars	Percent
All farms reporting...	2,079,257	100.0	286	11.8	2,343	100.0
General.....	541,644	1/26.1	307	18.5	1,649	70.4
Animal-spec..	395,536	19.0	311	8.2	3,752	160.1
Dairy.....	341,410	16.4	293	12.6	2,326	99.3
Cash-grain...	330,284	15.9	283	9.0	2,856	121.9
Abnormal.....	110,280	5.3	192	13.0	1,366	58.3
Self-sufficing	101,637	4.9	264	62.5	422	18.0
Poultry.....	68,728	3.3	208	15.4	1,338	57.1
Crop-spec....	52,864	2.5	237	9.9	2,123	90.6
Truck.....	19,023	0.9	201	8.6	2,112	90.1
Fruit.....	16,517	0.8	224	8.7	2,409	102.8
Cotton.....	13,663	0.7	156	7.9	1,609	68.7
Stock-ranch..	11,974	0.6	311	4.3	6,780	289.4
Unclassified.	75,697	3.6	xxx	xxx	xxx	xxx

/1 Adjusted to 100 percent.

the self-sufficing group) varied from 58 to 160 percent of the average for the area, indicating a wide diversity in level of income to the operators of these different types of farms.

Physical and economic conditions tend to bring about a greater degree of uniformity in pattern of farming in specific areas than is indicated by table 2, even though a high degree of diversity may characterize those patterns.

Table 3 gives a partial indication of the degree of uniformity existing in the different States.

In five of these States, general farming (no one enterprise providing 40 percent or more of the total income) predominates; in three, the predominant type of farm is cash-grain; in two, animal-specialty; and in two, dairy. North Dakota has the most specialized type of farming of any of these States, with 70 percent of its farms classified as cash-grain, and 90 percent included in three major types. Ohio, on the other hand, is the least

specialized, with only 62 percent of its farms included in three major types, with 36 percent classified as general farms.

Table 3.--Distribution of the three major types of farming in individual States and related items, 1930 U. S. Census

State (and total number of farms per State)	Major types of farming	Number of farms each type	Percent- age of State total number farms	Value of farm products used by operator's family (farms re- porting)	Value of farm products sold, traded, or used by operator's family (farms reporting)
Illinois (214,497)	General	55,697	26.0	\$289	\$1,526
	Cash-grain	52,475	24.5	279	3,220
	Animal-spec.	36,153	16.9	281	4,020
Indiana (181,570)	General	62,775	34.6	273	1,453
	Animal-spec.	34,318	18.9	259	3,048
	Dairy	17,303	9.5	237	2,006
Iowa (214,928)	Animal-spec.	101,898	47.4	356	4,174
	General	41,720	19.4	363	2,149
	Cash-grain	34,133	15.9	311	3,212
Kansas (166,402)	Cash-grain	57,789	34.7	259	3,187
	General	38,077	22.9	296	1,485
	Animal-spec.	34,101	20.5	282	3,934
Michigan (169,372)	General	55,932	33.0	283	1,568
	Dairy	40,679	24.0	245	1,915
	Crop-spec.	16,620	9.8	226	1,719
Minnesota (185,255)	Dairy	65,401	35.3	327	2,279
	General	53,144	28.7	365	2,184
	Animal-spec.	21,576	11.6	344	3,626
Missouri (255,940)	General	80,914	31.6	282	1,173
	Animal-spec.	56,695	22.2	277	2,968
	Self-sufficing	25,999	10.2	265	422
Nebraska (129,458)	Animal-spec.	44,433	34.3	352	4,544
	Cash-grain	43,364	33.5	303	2,831
	General	22,740	17.6	362	1,969
North Dakota (77,975)	Cash-grain	54,857	70.4	319	2,950
	General	12,159	15.6	349	2,132
	Animal-spec.	3,547	4.5	314	3,640
Ohio (219,296)	General	79,540	36.3	291	1,589
	Dairy	29,776	13.6	259	2,240
	Animal-spec.	26,993	12.3	268	3,021

Table 3.--Distribution of the three major types of farming in individual States and related items, 1930 U. S. Census (Continued)

State (and total number of farms per State)	Major types of farming	Number of farms each type	Percent- age of State total number farms	Value of farm products used by operator's family (farms re- porting)	Value of farm products sold, traded, or used by operator's family (farms reporting)
South Dakota (83,157)	Cash-grain	25,868	31.1	\$269	\$2,647
	Animal-spec.	23,734	28.5	314	3,877
	General	16,969	20.4	321	2,153
Wisconsin (181,767)	Dairy	125,301	68.9	316	2,447
	General	21,977	12.1	337	1,745
	Crop-spec.	7,269	4.0	271	2,195

Adjustments Constantly Being Made

Although in general the agriculture of the area is considered to be stable, the fact remains that within the generally prevailing patterns existing in the different sections, adjustments of major significance are constantly being made to meet changing conditions.

The total number of farms in the five eastern Corn Belt States as reported by the United States Census Bureau declined from 1,123,489 in 1910 to 996,502 in 1930, but increased to 1,083,687 in 1935, as the unfavorable economic situation subsequent to 1930 forced a greater number to resort to the land as a means of livelihood. Much of this increase in the number of farms in these States reflects the return of unemployed industrial workers and other urban residents to small tracts of land in order to have some form of productive labor during this period of economic distress. In the seven western North Central States, although the 1920 Census indicated slightly fewer farms than in 1910, the remaining census periods indicated some increase in numbers over preceding census enumerations. There were 1,109,948 farms enumerated in the 1910 Census and 1,179,856 in the 1935 Census.

An even greater change has occurred since 1900 in the organization of the farms of this area. Horses and mules increased in numbers from 1900 to 1915/5, thereby providing an outlet for an increasing acreage of feed crops. However since that date, with the expansion of power farming, horse and mule numbers have declined until in 1939 their numbers are 35

5/ U. S. Department of Agriculture, Bureau of Agricultural Economics.

Livestock on farms, January 1, 1867-1935. Revised estimates number, value per head, total value, by States and divisions. 137 pp. Washington, D. C., 1938. Processed.

percent less than in 1900 and 51 percent less than in the peak year of 1915. This decrease in demand for feed crops for work stock released the products of numerous acres for feed for other classes of livestock or these acres for other types of crops.

During the period from 1900 to date, hog numbers have followed a fairly definite cyclical pattern within an upward trend increasing from 28,990,000 head at the bottom of a cycle in 1903, to 40,195,000 head at the bottom of another cycle in 1931. The upward trend was halted in 1933 and 1934 by the Agricultural Adjustment Administration programs and drought and hog numbers declined to 24,537,000 in 1935, the smallest number on farms January 1 of any year since the beginning of the century. By January 1939, the total number on farms had increased to 30,971,000, only slightly greater than the number in 1930.

The number of all cattle on farms in the area also has varied widely during this period, although not to so great an extent as have hog numbers. Cattle numbers increased from the peak of a cycle with 30,122,000 head in 1904, to a peak of 34,039,000 in 1934. On January 1, 1939, cattle numbers were estimated at 30,233,000, only slightly higher than in 1904.

Sheep numbers were only 2.5 percent greater in 1939 than in 1900, although during that period numbers varied from 6,620,000 in 1923, to 11,423,000 in 1936.

The number of practically all classes of livestock varied more widely relatively within given States during this period than for the area as a whole. Such variations represent both short-time and long-time adjustments by farmers to changing conditions and, in turn, have exerted a profound influence on the market outlet for the feed crops produced within the area.

Although the acreage of any specific crop harvested in any given year may be so influenced by weather conditions as to submerge trends in production, the following variations in crop acreages harvested are worthy of note when considering the agriculture of this area.

The acreage of corn harvested has varied from 69,697,000 acres in 1932 to 52,880,000 in 1938; oats from 35,079,000 acres in 1921 to 21,700,000 in 1934; wheat from 24,590,000 acres in 1934 to 44,422,000 in 1938. The average acres in wheat for the first 5 years of the current century was 32,094,000. Land planted to rye varied from 1,297,000 acres in 1900 to 6,081,000 in 1919, the acreage harvested in 1938 being 3,436,000. Acres in soybeans increased from 710,000 in 1925⁶ to 5,349,000 as a peak in 1935, with 4,973,000 acres in 1938. Acres in barley increased from 3,133,000 acres in 1900 to 10,567,000 in 1929, since declining somewhat with 7,532,000 acres harvested in 1938.

⁶/ Comparable data not available for these crops prior to 1924.

The acreage of all tame hay increased from 20,885,000 acres in 1900 to 29,609,000 in 1922, with 25,687,000 acres being harvested in 1938. Clover and timothy hay declined in harvested acreage from 20,693,000 acres in 1924/7 to 9,305,000 in 1937, increasing to 11,142,000 acres in 1938. Alfalfa hay acreage increased from 4,818,000 acres in 1924/7 to 8,418,000 in 1936, declining to 7,471,000 acres in 1938.

Table 4 indicates more specifically the trends in acreages of these crops from 1900 to 1938 inclusive on the basis of acreages every fifth year until 1935, and annually from 1935 to 1938 inclusive.

Table 4.--Acreage of crops harvested in 12 North Central States^{1/}

Year	Corn	Oats	Wheat	Rye	Soybeans	Barley	Flax-seed	All tame hay	Alfalfa
					1,000 acres				
1900	57,100	23,365	31,940	1,297	xxx	3,133	2,720	20,885	xxx
1905	57,216	25,655	32,275	1,499	xxx	4,669	2,420	25,160	xxx
1910	60,350	28,425	32,929	1,489	xxx	5,481	2,002	25,870	xxx
1915	59,060	28,920	41,590	2,496	xxx	5,231	866	25,725	xxx
1920	60,589	32,991	40,823	3,916	xxx	5,373	1,386	27,283	xxx
1925	65,618	35,789	34,366	3,164	710	5,774	2,831	27,384	4,943
1930	65,164	32,481	39,938	3,024	1,811	9,696	3,263	26,599	5,810
1935	56,004	31,446	32,388	3,537	5,349	9,711	1,992	25,560	7,904
1936	55,297	25,897	29,542	2,269	4,088	5,951	1,071	27,625	8,418
1937	56,557	27,707	41,066	3,274	4,655	7,374	880	24,681	7,893
1938	52,800	27,643	44,422	3,436	4,973	7,532	876	25,687	7,471

^{1/} Division of Crop and Livestock Estimates, Bur. Agr. Econ.

Soil Depletion a Serious Problem

In spite of the abundant natural soil resources found in these 12 States, the area is not without definite soil-maintenance problems of major economic import. In general, crop yields in the area only have been maintained or have actually declined in spite of numerous improved techniques in production which should tend to increase yields. For instance, Klemme and Coleman^{8/} show that the yields of three major crops in Missouri - corn, oats, and hay - are less in recent years than in the decade 1868-77, and that wheat yields are only slightly higher than in the earlier period. At the same time they estimate that, with improved production practices as employed in the State, wheat yields should show an increase of 4 bushels, or 30 percent, if the productivity of the land was the same in recent years as formerly, with somewhat comparable increases to be expected from corn and oats. They point out that during the period of approximately 70 years, during which much of Missouri's soil has been cultivated, "more than one-third

^{7/} See footnote 6, page 7.

^{8/} Klemme, A. W., and Coleman, O. T. Evaluating annual changes in soil productivity. Mo. Agr. Expt. Sta. Bul. 405, 31 pp., illus. Columbia, 1939.

of the total organic matter and nitrogen content of the virgin soil has been destroyed by cropping."

Evidence as to crop-yield trends as cited by them is presented in table 5.

Another class of evidence indicating the extent to which soils of the area are deteriorating under the cropping systems being followed by farmers is that presented by the National Resources Board⁹ relating to soil erosion. This report indicates that on approximately 31 percent of

Table 5.--The average yields of the principal cereals and hay crops grown in Missouri for six 10-year periods

Crop	1868-77	1878-87	1888-97	1898-1907	1908-17	1918-27
Corn.....	30 bu.	27.4 bu.	28.6 bu.	27.5 bu.	28.9 bu.	27.7 bu.
Wheat.....	12.5 bu.	11.8 bu.	12.0 bu.	12.9 bu.	13.7 bu.	13.0 bu.
Oats.....	28.7 bu.	26.5 bu.	21.8 bu.	22.9 bu.	26.6 bu.	23.6 bu.
Hay.....	1.37 T.	1.2 T.	1.18 T.	1.2 T.	1.1 T.	1.2 T.

the area at least 25 percent of the land has lost from one-fourth to three-fourths of the original topsoil from sheet erosion; and that on approximately 5 percent of the area 25 percent or more of the land has lost over three-fourths of the topsoil. Wind erosion is reported as having affected 25 percent of the land moderately and 6 percent severely. Gully erosion is reported as being incidental on 22 percent of the land and severe on 10 percent. It is further estimated that approximately 2 percent of the land has been destroyed for tillage purposes, and only 35 percent shows little or no effects of erosion. Individual State estimates indicate much more serious conditions than these average figures would imply.

Table 6 indicates by States the degree to which the various types of erosion have progressed as reported in this reconnaissance survey.

A Fluctuating Price Level Has Created Serious Economic Conditions

During the first two decades of the current century, farmers of the Midwest were lulled into a false sense of economic security through what appeared to be a normal accretion in land values which was characteristic of that period. As a result, a high state of commercialization in the agriculture of the area developed and, when the inflated prices of the war period materialized, more than the usual number of farms were purchased with the expectation that they could be paid for out of the farm income produced. However the collapse in prices subsequent to the war period resulted in a drop in land values of about one-half in the eastern and two-

⁹ U. S. National Resources Board. Supplementary report of the land-planning committee. Part V. Soil erosion; a critical problem in American agriculture. 112 pp., illus. Washington, D. C., 1935.

thirds in the western Corn Belt. It is obvious that under such conditions the previously existing relationships between debt structure, values, and annual farm returns would be materially changed.

Table 6.--Erosion summary - 12 North Central States. Percentage of areas within which more than 25 percentage of the land has been affected/¹

State	Percentage of area affected by--						Percentage of area--	
	Sheet erosion		Wind erosion		Gullying		Essentially destroyed for tillage	Showing little or no erosion
	1/4 to 3/4 topsoil lost	Over 3/4 topsoil lost	Moderate	Severe	Occasional	Severe		
Ill.	36.9	2.4	0.4	0.4	22.5	15.6	2.4	59.9
Ind.	33.2	6.6	2.7	0.1	19.5	11.2	6.3	57.4
Iowa	47.6	9.2	2/ -	-	38.7	17.7	-	42.3
Kans.	46.3	14.5	16.8	10.3	49.5	6.6	5.0	16.8
Mich.	12.2	2/ -	6.6	1.6	5.4	0.2	2/ -	81.0
Minn.	19.6	-	18.0	6.6	14.2	1.0	-	54.3
Mo.	74.1	4.3	-	-	51.0	3/33.8	2/ -	15.2
Nebr.	27.7	6.2	34.0	7.0	16.8	4/14.6	5.5	5/23.6
N. Dak.	0.9	-	74.8	20.1	1.0	-	-	6/ 0.1
Ohio	32.2	16.0	28.4	6.1	-	-	3.9	51.8
S. Dak.	11.9	2/ -	84.8	8.2	10.7	7/ 5.8	2/ -	8/ 0.1
Wis.	31.7	-	3.8	5.4	25.6	10.3	-	54.7
Wt. av.	30.7	4.6	25.2	6.1	22.1	9.7	1.8	34.7

1/ See footnote 9, p. 9.

2/ Less than 0.1 percent.

3/ In addition, destroyed by gullies 20,990 acres, less than 0.1 percent.

4/ In addition, destroyed by gullies 2.1 percent.

5/ Erosion conditions not defined on 2.6 percent.

6/ Erosion conditions not defined on 4.4 percent.

7/ In addition, destroyed by gullies 9,167 acres, less than 0.1 percent.

8/ Erosion conditions not defined on 1.4 percent.

This is borne out by the fact that farmer bankruptcies in the United States reached an all-time peak of 7,872 in 1925, with 45 percent of these bankruptcies occurring in the Central States, even though only one-third of the Nation's farms were located there. Even as late as 1938, although the refinancing procedures of the Farm Credit Administration, the Farm Security Administration, and private lenders had reduced the annual number of farmer bankruptcies to 1,799 in the Nation, 41 percent of these foreclosures were in these 12 States. The equity of owner-operator farmers in 1910 in these States amounted to 73 percent of the total valuation of their farms; in 1930, this equity had been reduced to only 56 percent, reflecting the greatly increased debt burden being carried by current farm operators.

Another reflection of the financial difficulties facing these farmers is the increase in tenancy. From 1910 to 1935, the percentage of land operated under lease in the western Corn Belt States increased from 37 percent to 53 percent. However, in the eastern Corn Belt the increase was slight.

The total gross farm income to farmers of these States declined nearly three-fifths from 1929 to 1932 and subsequently recovered to approximately three-fourths of the 1929 level in 1938 (table 7). Again the situation in

Table 7.—Gross farm income¹ in 12 North Central States, 1929-38, inclusive
(in millions of dollars)

State	1929	1930	1931	1932	¹ / ₁₉₃₃	¹ / ₁₉₃₄	¹ / ₁₉₃₅	¹ / ₁₉₃₆	¹ / ₂ / ₁₉₃₇	¹ / ₂ / ₃ / ₁₉₃₈
Ohio.....	406	333	272	192	225	279	343	375	421	365
Indiana.....	350	281	215	161	179	232	276	307	340	310
Illinois.....	574	491	350	272	294	358	461	513	586	544
Michigan.....	288	236	179	142	161	186	220	253	288	250
Wisconsin.....	444	361	257	184	204	236	295	350	369	326
Total E.N.C.	2,062	1,702	1,273	951	1,064	1,291	1,595	1,798	2,004	1,796
Minnesota.....	459	385	268	195	217	254	320	375	413	374
Iowa.....	751	628	434	311	346	415	528	591	601	636
Missouri.....	406	326	245	186	212	236	281	296	318	289
North Dakota..	212	148	73	78	106	86	116	114	139	116
South Dakota..	244	195	134	76	80	89	116	129	116	123
Nebraska.....	459	382	248	167	191	242	252	299	287	237
Kansas.....	461	347	258	168	193	245	283	304	354	272
Total W.N.C.	2,991	2,411	1,661	1,182	1,346	1,569	1,897	2,109	2,228	2,047
Total N.C.	5,053	4,112	2,934	2,133	2,411	2,859	3,493	3,907	4,232	3,843
Percentage of 1929.....	100.0	81.4	58.1	42.2	47.7	56.6	69.1	77.3	83.7	76.0

¹/ Includes benefit payments and A.A.A. slaughter purchases.

²/ Individual State figures raised 4 to 8 percent in 1937 and 1938 under new method of calculation.

³/ Preliminary. Source: Bureau of Agricultural Economics, U. S. Department of Agriculture.

specific States and sections within the area has been much more acute. For instance, in 1932 the gross income to farmers in North Dakota, South Dakota, and Nebraska amounted to only 35, 31, and 36 percent, respectively, of the 1929 level, and in 1938 had recovered to only 55, 51, and 52 percent, respectively.

In many of these States the unusually adverse weather conditions prevailing during the past several years coupled with very low prices for farm products have resulted in extreme economic distress in very extensive areas. As a result there has been some acceleration in the rate of soil depletion through farmers' attempts to meet extremely pressing financial obligations by taking as much from the land as possible, with a minimum effort on maintaining the productivity of the land where such efforts have meant cash outlay or forfeiture of an opportunity to realize a current cash return.

Individual Farmers' Incomes Vary Widely

Numerous research and extension studies conducted in the area reveal the fact that there is a wide disparity in the financial return to individual farmers operating farms under very similar conditions. Also, a similar wide disparity is shown in the degree to which the productive capacity of the land of these farms is being maintained. These differences are a reflection of differences in managerial ability of farmers and in the degree to which farming systems have been adapted to the natural and economic conditions peculiar to the area and the period involved. Expressed in another way, these differences emphasize the fact that many farmers have not and are not making the adjustments in their farming operations that would insure them the maximum economic return consistent with their own individual interests and the welfare of agriculture in the future.

As an example of differences in income being derived by farmers operating under very similar conditions, Mosher and Case/¹⁰ have shown that in one area in Illinois the high-income one-third of the farmers in a given group over a 10-year period obtained net incomes 162 percent higher than did the low-income group. (See table 8.)

Summary

It is obvious from the foregoing that the agriculture of the Central States is constantly changing, is of a highly commercial character, offers a wide diversity of opportunity, is faced with numerous major problems and needed adjustments, and that numerous farmers are not taking full advantage of the opportunities afforded them to improve their own economic status within the realm of practical possibilities and consistent with the long-time welfare of the industry as a whole.

^{10/} Mosher, M. L., and Case, H. C. M. Farm practices and their effects on farm earnings. Ill. Agr. Expt. Sta. Bul. 444, pp. 471-604, illus. Urbana, 1938.

Table 8.--Factors related to organization and earnings of 57 Illinois farms, 1925-34, inclusive/1

Item	19 most profitable farms	19 least profitable farms
Size of farm, acres.....	244.4	234.4
Total productive man work units.....	438.1	369.7
Percentage of tillable land.....	92.1	89.3
Percentage of tillable land in:		
Corn.....	44.6	42.8
High-profit crops.....	63.9	62.6
Medium-profit crops.....	13.1	12.3
Low-profit crops.....	23.0	25.1
Crop-yield index.....	103.1	95.7
Livestock efficiency index.....	104.5	95.1
Price index for products sold.....	101.4	97.0
Man-labor cost per man work unit.....	\$3.57	\$4.09
Man-labor cost per acre of farm.....	\$6.40	\$6.44
Horse and machinery cost per man work unit.....	\$2.07	\$2.52
Horse and machinery cost per acre of farm.....	\$3.71	\$3.97
Expenses per \$100 gross income.....	\$52.00	\$74.00
Total:		
Capital investment.....	\$51,155.00	\$48,228.00
Receipts and net increases.....	\$6,078.00	\$4,291.00
Expenses and net decreases.....	\$2,097.00	\$2,093.00
Net income from investment and management.....	\$2,888.00	\$1,102.00
Labor and management wage.....	\$1,243.00	-\$419.00
Rate earned on total farm investment.	5.65 pct.	2.28 pct.

1/ Adapted from tables 57 and 60, pp. 539 and 546, Bul. 444, Agricultural Experiment Station, Univ. of Ill., August 1938.

EXTENSION ACTIVITIES

Approach and Objective

Recognizing fully the diversity of situations and opportunities facing farmers of the Midwest, some of the elements of which have been referred to briefly above, extension workers in farm management in this area during the past quarter of a century have developed out of their experiences the conviction that the most effective method of teaching farm management is to utilize the experiences of practical and successful farmers as demonstrations for other farmers. Since the nature of farm-management work centers around the financial returns from the entire farm business, information both as to the ways in which farms are operated and the costs and returns involved are essential for demonstration purposes. Midwestern farm-management extension workers have found the farm business record kept by the farmer during the year the most fruitful source of such information. Hence in practically all these States farm-management extension programs include farm business records as a foundation upon which much of their teaching program is based.

Such records, in many instances kept on the same farms over a period of years, not only provide information as to how successful farmers are operating their farms in contrast with less successful farmers, but also provide farm-business teaching material that is current, locally pertinent, and realistic, and thereby avoid the skepticism of farmers that teaching material is theoretical and unproved. The keeping of such records by local farmers also provides county agents and State college extension specialists with a nucleus of informed farmers whose assistance is invaluable through extending their influence to other farmers of the area and whose farms serve as the local demonstrations for general teaching activities. Such material and such farms are used as a basis for farm-management tours, extension schools, general meetings, news articles, radio talks, guidance to other farmers, and in many other ways in connection with the farm-management extension-teaching program. The ultimate objective of all such work is to assist farmers in their attempt to obtain the greatest possible income consistent with sound long-time agricultural practices.

Basic Farm-Record Work

Although procedures used in developing this phase of farm-management extension work vary from State to State, a somewhat typical procedure is that reported by Michigan in 1938.

"The farm-accounting project continued to be given major emphasis in 1938. It is the major purpose of this project to assist Michigan farmers in the study and improvement of their farm business. This is done through the use of farm records. It is by this method that we encourage changes in the organization and operation of the farms to increase the incomes of individual farmers. The increased incomes will, in turn, be used to improve the standard of living on these farms - which, after all, is the real aim of the entire Extension Service * * *.

"During the period January through April, farm-management specialists called at the county agricultural agent's office in each of the enrolled counties. The county agents arranged a schedule for each farm-account cooperator to come in and have his book checked by the specialist. The book was then taken to the college to be closed and summarized * * *.

"During June, July, August, September, and October, the enrolled cooperators (those starting books for the first time as well as the old cooperators) were visited by a representative of the farm-management department usually accompanied by the county agricultural agent. A total of 1,879 cooperators were enrolled. If the cooperator was new, the time was spent in inventorying his land and buildings, checking the other inventories, and in general going over and helping him with the record book. If the cooperator was keeping his second or more book, he was given a comparative report for his area. Based on this, the extension specialist and county agent proceeded to analyze his business and make suggestions as to the changes that could be made on the farm to improve the earnings * * *.

"The nature of some of the changes we are recommending and that are being followed are: (1) Increase in the tillage acreage; (2) increase in the volume of business handled; (3) changes in the kinds and amounts of livestock; (4) improvement in the care and feeding of livestock so as to improve the production and quality of the product; (5) incorporation of a high proportion of the land in the higher-profit crops; (6) increase in acreage of alfalfa and sweetclover; (7) modification of field arrangement; (8) change in marketing practices; (9) greater attention to a soil-building program; (10) improvement of crop yields; (11) increased efficiency in the use of buildings; and (12) changes in the power and machinery set-up.

"The follow-up visits for 1938 revealed that provision must be made to check 1,635 books for summarization purposes during the first 4 months of 1939. This is the largest number of individuals to be served in this manner in any year. The problem always confronting us is how to meet the increased demand for the project. The young men returning to the farm after vocational agricultural training in high schools, after Michigan State College short courses, or regular college training seem to be anxious to enroll for the project. The activities of the Farm Credit Administration, Farm Security Administration, Soil Conservation Service, and other agencies stimulate a demand for the farm accounting project, as do the suggestion of one farmer to another and, of course, the various activities of the Extension Service. It is recognized that it will be a long time before any high percentage of farmers become businesslike enough to study their business by means of adequate records and accounts, but the number is rapidly approaching the maximum that we can serve following the procedure of our established project. It is likely that a maximum quota must be set for each county, and that additional persons can be helped only to a lesser degree.

"It is now the plan to conduct a training course in farm accounting by correspondence for all county agricultural agents and 4-H Club agents in a further attempt to equip them to handle inquiries relative to the proper

method of keeping farm records and analyzing the business. This course will be offered early in 1939. Perhaps, another year, a similar course can be offered to all F. S. A. county supervisors and to all teachers of vocational agriculture. Then these local workers can promote farm accounting with the rank and file of farmers, and our limited number of project cooperators may serve as the source of records permitting of this department's developing annually a report which may serve as a basis for comparison." * * *.

The annual report from the State of Nebraska summarizes briefly the procedure used in that State in enrolling farm-record cooperators and in rendering assistance to them during the year.

"The methods followed this year in carrying on this phase of work were practically identical with the methods followed in preceding years. New cooperators in this project were obtained by county agricultural agents through individual contacts or by calling selected groups to central points where schools were held for instruction and assistance was given in starting their record books. Old cooperators were given assistance with their inventories at the time their old record books were checked in. These farm-account schools were usually conducted by a representative of the farm-management office working through the agricultural agent. All cooperators were visited once during the summer months, usually by a farm-management representative in company with the agricultural agent. This was done with new cooperators during May and June, and old cooperators were visited from May to August, when summaries for the preceding year were returned. Opportunity was given them at this time to raise questions regarding their accounting procedure for the year.

"When the summaries were returned, the showings of the preceding year were gone over carefully by the agricultural agent or the farm-management representative with the cooperator. At this time the functionings of the different farm-management principles were stressed and their application to the particular business of the cooperator was brought out by the data from his own record. This gave an opportunity for the cooperator to ask questions regarding the organization of his farm business and to discuss with the specialist any phase of farm management, outlook, or farm organization that seemed to be applicable. At the close of the year, through the agricultural agent, schedules were made for representatives from the farm-management office to meet with the cooperators on given dates and hours for checking in their completed records.

"Late in 1937 and early in 1938, from about the middle of December until the middle of February, two teams of two men each from the farm-management office covered the State in collecting the farm account books. Of the four men working in the field, three were part-time men especially hired for this purpose. They were given some preliminary training before going into the field, and after going into the field they were given training by a representative of the farm-management office who worked with them for a few days during the first week or 10 days that they were working. One specialist from the farm-management office worked continuously in the field to assist in

collecting the record books. These record books were summarized by the Department of Rural Economics, and all were finally returned to the agents for delivery to their owners by May. Twenty-seven farm-business reports were prepared, and individual summaries were returned in person to the cooperating farmers during the summer months with the work being completed by mid-August.

"A series of letters was prepared by the farm-management office to be sent to the farm-account cooperators every 2 months, beginning in April and ending in December. These letters were sent in sufficient quantity to agricultural agents to supply the cooperators in their respective counties. The agents signed and mailed these letters. These letters gave instruction and suggestions on how best to keep the farm-account books, stressing parts which seem to give especial difficulty as indicated by the records when they come to this office for summarization."

Evidence available indicates that approximately 14,000 farmers in these 12 States cooperated with the Extension Service in this type of general farm-record work during 1938, and submitted their records for summary and analysis by the college staff, or, in a few instances by county agents. The use of the factual material thus made available for general educational programs is illustrated in subsequent pages of this summary.

In addition to the 14,000 or more farmers given direct personal assistance through this means, there are several thousand additional farmers, many of whom have cooperated with the Extension Service in record projects in the past and now feel well-enough equipped to get along without direct guidance, who are keeping records on their farm businesses in books obtained from the colleges. During 1938 approximately 64,000 farm-record books were distributed, upon request, to farmers of these States by the Extension Service, in many instances being sold at cost.

Enterprise Records

Another type of record work carried by several of the farm-management extension specialists is that of enterprise records. This work is directed toward the determination of the costs and returns involved with a specific enterprise and factors making for success in the handling of each such enterprise. Again, in addition to the direct aid rendered to cooperating farmers keeping such records, the information thus made available is utilized widely in general educational programs with the mass of farmers.

In several States the enterprise record work is a joint activity of the Experiment Station and the Extension Service, whereas in others the experiment-station personnel assumes responsibility for all the field work in getting such records kept and the analysis work, while extension personnel assumes responsibility for the follow-up educational work only. Also in several instances such enterprise record projects are a joint responsibility of farm-management extension specialists and production extension specialists. Six of the 12 States report extension farm-management specialists carrying full or partial responsibility for enterprise record work involving approximately 1,800 individual enterprise accounts.

An example of an enterprise account project carried jointly by farm-management specialists and production specialists is one reported by Iowa, in this instance with 4-H Club members. An excerpt from the Iowa farm-management annual report covering this phase of work follows:

"A very large increase in the 4-H lamb-club feeding contest resulted in 475 records on lots of 16 lambs for the year 1937-38. This project was largely conducted by the animal husbandry section of the Extension Service, and our cooperation consisted of assistance in the preparation of forms and in the analysis and interpretation of the records. We feel that close cooperation with other subject-matter departments will be much more effective in getting economic and farm-management material used by club members, farmers, and others, than insistence upon this type of material's being handled by our own group exclusively and attempting to point out how it can be used in their programs. Our experience here in Iowa would indicate this as being a sound procedure."

Farm-Management Associations

A more advanced type of farm-management activity involving the keeping of farm-business records is carried in four of these States - Illinois, Iowa, Kansas, and Minnesota. This work, financed partly by the college and partly by farmers themselves, is further differentiated from the regular extension farm-record work by the fact that a full-time field man is employed to work directly with the farmers involved. This field man visits each cooperating farmer three to four times a year in addition to his contacts at the time of group meetings. Farmers' contribution to the cost of the work varies from practically 100 percent to an approximate minimum of 55 percent, dependent on the association and the system used in the different States. As the farm-management information obtained through these associations is usually much more detailed than that obtained in the more widespread extension-record projects, these associations provide a very fruitful source of farm-management teaching material as well as demonstration farms. During 1938, 13 of these associations functioned in these four States with approximately 2,200 farmers cooperating.

The following brief excerpts from a section of the Illinois annual report indicates in part the nature of this work as carried in that State. Work in the other three States is essentially the same.

"About 640 farmers completed the work of the Farm Bureau Farm Management Service for the year 1938. This increase is about 160 over the number who finished the work in 1937. Three complete groups, including farmers in 23 counties, operated during the year 1938 * * *."

"Four reports were issued during the year:

"1. The thirteenth annual report of the Farm Bureau Farm-Management Service on 400 farms on the higher-valued land of north central Illinois.

"2. The annual report of the Farm Bureau Farm Management Service for 39 farms on the lower-valued farms of north central Illinois was also published.

"3. A 3-year summary report of the Farm Bureau Farm Management Service on 200 farms of north central Illinois was published.

"As in past years, one copy of a report was prepared for each cooperator. The record for his farm was copied into the blank column of the report beside the average of all farms used in making up the report. These individually prepared reports were returned to the cooperators personally by the field men and carefully studied by the cooperators and the field men working together. It is more apparent from year to year that cooperators in the Farm Bureau Farm-Management Service do appreciate these annual reports, which provide each with a complete analysis of the business, showing how profitable it has been compared with other farms in the same area. The reports show, too, where the weaknesses in the organization or operation of the individual farm may be.

"4. A fourth report, entitled 'Recipes of Good Farmers,' was prepared to accompany the 3-year summary report. These so-called recipes of good farmers were secured by visiting those cooperators whose 3-year report indicated that they had done particularly good work along the line of the enterprise for which their practices are given * * *.

"These so-called recipes have been found very helpful, as the field man talks over his business analysis with each of the cooperators. They enable the field man to tell a cooperator whose record shows a loss from a given enterprise the practices followed by some of the most successful farmers in that particular enterprise.

"Farm-management tours. Six farm-management tours were attended by 550 people. Such tours, on which a few of the outstanding farms are visited by the cooperators, continued to be a valuable part of the Farm Bureau Farm-Management Service. A tour held this year in Woodford County was the twenty-third annual farm tour held in that county since the county extension work was begun in 1916. The tour was well attended by 75 farmers, several of whom have attended a large number of the 23 tours that have been held during the past 23 years.

"Tours and meetings. A combined farm-management tour and meeting was held for the cooperators of the 10 counties in western Illinois. Two farms were visited during the forenoon. At noon the cooperators gathered in a covered pavilion in a park, and had a picnic dinner. A 2-hour discussion of farm problems followed in the afternoon. Special attention was given to soil problems, and Dr. F. C. Bauer, of the department of agronomy, led the discussion. A successful cattle feeder from the northern Illinois area and a successful hog producer from the north central area discussed their own practices in producing beef and pork.

"Cooperators' meetings. Twenty-one county meetings of cooperators were held during the month of December. At all these meetings the relation of certain farm practices to farm earnings was discussed. Illinois Agricultural Experiment Station Bulletin 444, 'Farm Practices and Their Effects on Farm Earnings,' was used as a basis of the discussion. A copy of this bulletin was handed to each of the cooperators present. Almost all of the data in this bulletin were taken from records of cooperators in the Farm Bureau Farm Management Service during the 8 years 1925 to 1932.

"A second quadrennial farm-management meeting, planned especially for the 200 cooperators who had completed 3 years of records used in the 3-year summary report, was held at Ottawa, Ill., November 16. The program consisted of three parts: First, the presentation of data included in the 3-year summary report and in Bulletin 444; second, 10- to 12-minute discussions by each of five cooperators who had done particularly good work with certain enterprises; third, an address by the guest speaker, Dr. E. C. Young, Purdue University, La Fayette, Ind., who is president of the American Farm Economic Association.

"The meeting was attended by approximately 800 people, most of whom came from the eight counties in the northern Illinois farm-management service area. However, there were people present from 21 other Illinois counties and from 1 other State.

"Reorganization of the service in northern Illinois. The Farm Bureau Farm-Management Service was organized for another 4 years in De Kalb, Kendall, Grundy, La Salle, Marshall, Putnam, Bureau, and Lee Counties. Two hundred and thirty-eight farmers signed agreements to cooperate in the service during the next 4 years. Of these, 156 have been in the service during the past 4 to 8 years; 82 are enrolling in the service for the first time. Seventy-four percent of those who have been in the service during the past year are continuing.

"The reorganization of the project was completed with the least effort in the history of the project. Those who continued in the project were enrolled for another 4 years by the field man as he took their 3-year summary report to them. Most of the new cooperators were enrolled by the farm advisors, who were accompanied by some of the leading cooperators or by one of the field men. The field men spent only 7 days on this work."

4-H Farm Records

A considerable degree of emphasis in these States is placed on teaching prospective farmers the basic elements of farm-record keeping, the principles of farm management, and methods of appraising farm businesses as to their long-time income-producing capacity. Again farm records provide the point of departure for such educational work.

Most of the farm-management specialists give considerable time and attention to cooperating with 4-H Club leaders in the promotion of 4-H

farm-record activities. 4-H Club members, both boys and girls, are encouraged to keep farm records, to appraise the farm business represented, and to arrive at conclusions as to adjustments which should be made in order to make the business more profitable.

In several instances the farm-management specialist rendered approximately the same service to these junior farmers that was rendered to adults. Specialists held beginning schools for 4-H members, checked the records at the end of the year for completeness and accuracy, and either returned the books in person for consultation with the club member or, if that was impossible, arranged for the return of such books to the club members by the county agent or club agent.

Although this type of work varies widely as between States, the following brief report from Indiana is indicative of the way in which certain phases of this activity are handled.

"The farm-management extension department cooperated with the 4-H Club department in conducting a 4-H Club farm-accounting project and contest during the past year. A farm-management specialist assisted in developing plans and rules for conducting the project, in judging the Indiana book, and selecting those eligible for the national contest and in conducting a 50-minute period of training and instruction during 4-H Club round-up.

"Of the 85 books completed and sent in to the State 4-H Club office from 21 counties completing the project, 55 were sufficiently complete to enter in the national contest. These books were graded, and the best 36 books were sent to Chicago to the national contest * * *.

"Six more counties completed this project than in 1936. The opinions of the judging committee were that the general quality of both the record books and the accompanying analysis of the farm business was the best of any previous year. It is also the opinion of the committee that this project is stimulating and encouraging interest, and is training in a very important farm activity, namely, better business methods in farming."

Again a statement from the Michigan annual report summarizes very briefly the way in which this activity is being conducted there.

"The farm-management department sponsors the 4-H Club farm-accounting contest. Each contestant is required to keep a farm-account book for a period of 12 months, analyze the business, and suggest adjustments that should be made in order to improve the earnings. All 4-H Club boys or girls entered in this contest are given the same assistance as our regular project cooperators. It is expected that 101 books, from 26 counties, will be submitted for final judging during April 1939."

Farm Accounting in Public Schools

Since many of the Central States' public-school systems provide for the teaching of bookkeeping as a part of the regular curriculum, farm-management

specialists in these States have cooperated with the public-school authorities in providing teaching materials that will make possible the teaching of farm accounting to those who would prefer that type of bookkeeping to commercial accounting. Such material also is adaptable to the use of vocational agriculture students and teachers.

To make effective use of this teaching material, these specialists appear before teachers' conferences on a State-wide or sectional basis and instruct the teachers involved in the use of the books and forms provided.

In Nebraska, "the officials of the four normal schools in the State were contacted relative to installing courses of instruction in their curricula for teaching farm accounts to their students who are to be future teachers in the State." This report indicates that although "it is impossible to get an accurate measure of results in this type of work, more and more we find among our regular farm-account cooperators that many of the younger men about ready to start farming or actually farming for themselves are keeping accounts and are doing so as a result largely of having studied farm accounting while attending rural schools."

Records indicate that during 1938 over 11,000 record books were provided public-school students for use in connection with their school work. Also, over 6,000 special record forms were provided for the same purpose.

Numerous instances of this specific type of cooperation with public school officials could be cited. A slightly different form of cooperation is indicated by the following excerpt from the Iowa annual report.

"Cooperation with the Smith-Hughes instructors of the State consisted of preparing material and discussions for their midsummer staff conference. At this conference, all the farm-management material that might be of use to them in both their day school and evening school work was prepared in booklet form and given to each instructor present. The discussion centered around methods of doing farm-management and other economic educational work. The use of a couple of the Smith-Hughes instructors to indicate how farm management tied into the Smith-Hughes program was made."

Cooperation With Other Agencies

During recent years the experiences of many of the so-called action agencies have emphasized the need for local farm-management information for use in guiding the development of their respective programs in the different areas. Similarly these agencies and their cooperating farmers have felt the need for farm records on individual farms, not only as guides in the determination of adjustments needing to be made, but also as a check on the results of adjustments in operation. As a result, local workers of these agencies have sought and received the help of farm-management extension workers in encouraging the keeping of such records. The field personnel of these agencies and the Extension Service have cooperated closely in promoting farm-record work, in analyzing the material thus obtained, and in educational programs wherein such material is used. This type of cooperation has been

particularly close with the Farm Credit Administration, the Farm Security Administration, and the Soil Conservation Service.

In numerous States, extension economists in farm management have served in an advisory capacity to Farm Security Administration workers with their farm-management and farm-planning problems and, along with the experiment-station workers, have assumed the responsibility for summarizing and analyzing F. S. A. farm records kept during the year. In addition, in a few States at least, special training schools have been conducted by extension specialists at the request of local F. S. A. supervisors to teach these farmer clients how to keep records and how to use them.

A similar close working relationship prevails in most of the States with the Soil Conservation Service. For instance in South Dakota it is reported: "The Soil Conservation Service cooperated in the farm-record-book campaign. Approximately 225 Soil Conservation Service cooperators used the South Dakota farm record book in 1938. I. N. Chapman of the regional Soil Conservation Service office conducted five farm-record-book schools and assisted with a farm-record-summary school. Soil Conservation Service field men and foremen made farm-record-book check-up visits during the summer. The Extension Service also helped to make an economic survey of the Brown-Marshall Soil-Conservation District."

Minnesota reports in connection with their cooperative relationships with the Soil Conservation Service:

"A number of contacts have been maintained with the Soil Conservation Service during the past year. One of the most definite of these is the farm-account project, which has been conducted jointly with the Soil Conservation Service. This project is now completing its fourth year with about 55 or 60 cooperators. During 1937, there were 57 cooperators. In the summer of 1938, it was proposed by the Soil Conservation Service that this farm-records service be expanded to include 100 or more cooperators with an arrangement by which full-time field service would be provided by the Soil Conservation Service, with the college taking the responsibility of the supervision of the project. Under this arrangement the general division of responsibility between the departments is that the extension division assume general direction of the field activities and pay the clerical cost of summarizing these records, while the division of agricultural economics will take the responsibility of the supervision of the summarization. In the expansion of membership in this service it was agreed that noncooperators in the Soil Conservation Service will be accepted up to 50 percent of the total number, and that the increase in numbers will be confined to Houston County. No fee is to be charged.

"In connection with the Soil Conservation Service, meetings were held with groups of cooperators at various times during the year. Meetings were held at Spring Valley, Caledonia, and Winona, with members of the staff as well as cooperating farmers present for a discussion of the findings of the farm-management records. During the summer, a tour was made to the Winona area, at which time from 25 to 30 persons mostly from the agricultural college

inspected farms and compared observations. A special bus was used, and an all-day trip was made. Three farms and the United States forestry plantation were visited."

Numerous other examples could be cited, each varying in some slight degree from the others, but all indicating that farm-management extension workers at the State colleges are reaching a large number of farmers who otherwise could not be served through working closely with and through the field personnel of these other agencies of the Department.

For several years, officials of the Farm Credit Administration have felt that one of their big problems has been to develop an appreciation on the part of their field men of the principles of sound farm management as they apply in different areas, in order to insure that loans made will be on a sound and practical basis. At the same time, they have felt that many of their distressed loan clients could prevent eventual foreclosure and loss of title to their farms if they could be induced to follow sound farm-management practices. To these ends, F. C. A. officials have worked closely with extension farm-management workers and have asked for their assistance in attacking such problems. Again the particular type of service rendered by the extension farm-management personnel has varied widely as between States and different land-bank districts. Nevertheless, all this work has been productive, and cooperative activities between the two organizations have expanded during 1938.

In Kansas, farm-management workers "cooperated with the Farm Credit Administration of Wichita in conducting two land-appraisal schools as a start in a general educational program being prepared at present. Two days were devoted to each school. During the first day, representatives of the Farm Credit Administration and the Extension Service went over the farm thoroughly, taking soil samples, evaluating buildings, actually appraising the land, and planning the procedure to be followed in conducting the tour over the farm the next afternoon. On the second day, the morning meeting was held inside." At this meeting, discussion was centered on the importance of correct land appraisal, methods employed, factors to be considered, credit costs, the proper use of credit, and proper farm organization and land utilization in relation to credit.

"The afternoon meeting was conducted on the farm. Each person in attendance was supplied with a map of the farm, showing fields and pasture land, long-time average yields, and dimensions and capacity of major buildings. With these tools in hand, those present went over the farm taking soil samples of its different sections and discussing each sample and its relation to the entire farm set-up. After the farm was toured and the present organization discussed thoroughly, each person present prepared his own appraisal of the farm. These appraisals were read and compared with an unofficial appraisal that was made by those conducting the school. A great deal of interest was shown in this method of conducting the school, and, according to written reports received from several county agents who attended the meeting, the information was very worth while and should be included in a State-wide program."

Individual Farm Planning

One of the major objectives of farm-record work and the attendant educational activities is to assist farmers to plan most intelligently their future farm-business operations. In other words, in addition to the development of an understanding of the principles of farm management, there must be developed an ability to apply these principles if maximum results are to be obtained. To expedite the latter, several of the Central States have prepared farm-planning forms and have done a great amount of educational work relating to the use of such forms in furthering individual farm planning on a practical basis. Since an intelligent job of farm planning necessitates consideration of many production as well as economic problems, this type of work often takes the form of a coordinated extension project involving several of the production extension specialists as well as economics specialists. The extension work being done in this way is proving most productive and marks a forward step in rendering practical assistance to farmers on a farm-unit basis.

The following statement from Illinois indicates in some detail the manner in which this type of work was carried in that State during 1938.

"The following departments of the college of agriculture continued to pool their interests in soil conservation and land use with other agencies such as the Soil Conservation Service and the Agricultural Adjustment Administration: Agricultural Economics, Agronomy, Animal Husbandry, Dairy Husbandry, Agricultural Engineering, and Forestry. A committee representing the departments acted as a central clearing house in the determination of policies and relationships. The committee also outlined a definite action program involving local-leader training meetings and schools, tours, and the selection and development of demonstration farms.

"Sixty-six counties that started in the project in 1937 continued in 1938, and 20 new counties were added, making a total of 86 counties carrying the program. Seventy-one of these counties were contacted by members of the department of agricultural economics. The contacts consisted of 9 meetings in first-year counties, 51 all-day farm-planning schools, and 21 farm tours
* * *

"The meetings and tours were for selected leaders, and they were of a general informational nature. Representatives from several departments appeared on the programs. The member from agricultural economics, who was usually last, explained how to use practices and enterprises suggested by other subject-matter specialists in a profitable farm organization.

"The information given by representatives of other departments created a demand among farm leaders for help in working out individual farm plans. It was also noted that the work on farm plans created a desire for more subject-matter information. One farmer who was well trained in the principles of good farming started to work on a farm plan, but found it necessary to come to the university to get additional information from the agronomists and others before completing his work.

"Six hundred and sixty-seven farmers signed cards early in the year signifying their intention to complete farm plans. To help them carry out their intentions, a farm-planning booklet entitled 'Planning the Farm Business' was prepared by members of the department of agricultural economics. This booklet outlined a definite procedure and included forms that the farmer might use in working out his own plan. A few standards were also worked out in cooperation with other departments and presented in the booklet. That booklet filled a real need which was indicated by the demand for copies. The first run of 1,500 mimeographed copies was soon exhausted, and two additional runs of 1,000 and 1,500 copies were later made. The State Agricultural Adjustment committee also had 5,000 copies of this booklet mimeographed for local committee members. The demand for copies was particularly heavy from vocational teachers and leaders in the Soil Conservation Service.

"More time was spent in the field on farm-planning schools than on any other phase of the project. Fifty-one schools were held with a total attendance of 561 farmers. It was necessary to limit the attendance to a maximum of approximately 25 people because the work was of an individual nature. In selecting farmers to invite to the schools, the farm advisers gave special consideration to young men who were well grounded in the principles of good farming, made available to them through previous meetings and farm accounts. Attendance was not limited altogether to leaders in the soil-conservation project. One of the best schools in the series was held in De Kalb County, where the attendance was limited to young farmers under 35 years of age. Within 2 weeks after the school was held, every man who had been present had reported the progress made in working out his farm plan. Most of them reported their work complete in every detail.

"In addition to the county farm-planning schools, there was a special school held for the State Agricultural Conservation committee and district representatives. The effects of this school should be far-reaching, because the men who were present expect to pass on some of the principles of farm planning to the county and community committeemen, and they in turn to individual farmers."

A brief but indicative statement from Ohio indicates a similar type of work is well developed in that State, and definite progress in the same direction is being made in others.

"In the winter of 1937 and 1938, this attempt to correlate the efforts of all members of the staff into a unified program took the form of a five-session series of meetings held in five northeastern Ohio counties. These meetings were publicized as 'farm-unit schools' in which agronomists, livestock and farm-management specialists, and agricultural engineers would present closely correlated material and demonstrate methods of increasing farm income by bringing all farm enterprises into proper relation and balance with each other. Subject matter to be presented was prepared well in advance and organized for presentation with sequence and correlation constantly kept in mind. In the winter of 1938-39, meetings of this character were conducted in 15 eastern and 12 western Ohio counties. Although we can see many

opportunities for improvement in the technique of the farm-unit approach, we have had very favorable reports and comments from farmers and county workers participating in these meetings. We are therefore definitely planning to cooperate with administrative authorities and specialists of other departments in holding farm-unit schools in other counties during the winter of 1939-40. As work of this character involves several workers in other departments, all detailed arrangements and schedules for such meetings are made by the supervisory staff." * * *.

Four of the 12 States had organized individual farm-planning programs under way in 1938; in a fifth, a new farm-planning form was prepared and introduced. Over 12,000 individual farm-planning forms were provided farmers for their use through the various programs carried in the 4 States with developed programs.

Farm-Management Schools

Another organized extension activity carried in these States which has proved to be productive is the farm-management school. These schools vary from 1 day, two-session affairs, to a series of probably five separate meetings held at approximately weekly intervals. In each instance the major purposes are to help farmers develop an understanding of the farm-management factors making for success in a given area and to assist those participating in applying the principles involved to their individual situations. In turn, it is hoped that the limited number that can be handled in many of these schools, in view of the nature of the work involved, will serve as local leaders and demonstrators in obtaining a wider spread of influence in their respective communities.

Indiana is one State which limits such work to 1 day in a county or community, using as a basis for their teaching case examples and averages from their current and locally applicable farm-account records. The following quotation indicates the nature of these schools in that State.

"Farm-management schools were held in 37 counties with a total attendance of 4,073. Two hundred and two committeemen helped county agents in organizing and planning for giving publicity to and conducting these schools. In approximately half the schools, farmers took part in the program by presenting some phase of their farm program that records had shown was successful or by discussing their business in general. In some cases, farmers likewise served as chairmen of the schools. Most of these schools were conducted by one farm-management extension specialist this year. In previous years, two specialists presented the program at the farm-management schools. With only a few exceptions, the following program was presented at the 37 schools this year:

1. How two actual farms in the area are operated to make them more profitable than the average. Purdue specialist.
2. Profitable crop rotations for the county. Local farmer.

3. How to reorganize and manage one of the less profitable farms in the area to increase its income. Purdue specialist.
4. How I have used my farm accounts in analyzing my farm business. Local farmer.
5. Economic trends and some practical application of the 1938 outlook. Purdue specialist.
6. Summary of meeting. County agent.

"Most of the schools were started at 10 a.m. and dismissed at 3 p.m. In most cases the school was conducted on a discussional basis, especially the last talk in the morning and the last talk in the afternoon. More interest was shown this year in the schools along the lines of good practices that would increase the efficiency of the business and less along the lines of the outlook and adjustment phase. These schools have served as one of the best methods of teaching farmers good farm organization and management principles that result in higher incomes. They provide an opportunity for extending the information obtained in the basic farm-account project. The regular cooperators likewise enrolled in the basic farm-account project in the county, in the main, serve as the committee and the nucleus for arranging for the farm-management schools."

In Ohio a more intensive type of teaching program is carried under the phase of the work designated as farm-management schools. Such schools in this State are set up on the basis of from three to five separate sessions, with each session centering around one or more major farm-management principles. Mimeographed outlines are prepared for the use of the farmer "students" as guides for discussion and for reference purposes. The subject-matter materials used are derived from record books kept by farmers in the same or similar areas, and such material is revised and brought up to date from year to year as new material becomes available. In recent years more emphasis has been placed on the problem of soil conservation and land use in relation to income than in previous years.

Ohio reports that "20 formally organized farm-management schools for farmers were conducted during the year, with a total attendance of 606 individuals. * * *. Reports indicate that these are some of the most interesting contacts made by Ohio extension workers during the year. Because of the intensity of this work and the time required, only a limited number of counties can be serviced in this way."

Farm-Management Tours

Farm-management tours have occupied a prominent place in the extension program in the Central States for a long time. They serve the purposes of creating interest in farm-management work on the part of farmers participating, familiarizing them with the important factors making for success on typical farms in the area, encouraging them to analyze their own individual situations

in light of the principles demonstrated, and providing a practical and realistic demonstration on an entire farm basis for all participants to inspect. In connection with this last point, the usual custom is to select successful farms concerning which at least 1 year's record is available and usually more, so that factual evidence of previous methods of operation and results may be presented to the group on the tour.

Although the general principles and purposes of such tours are essentially the same wherever held, there is a wide variation in the particular manner in which farm-management tours are conducted in the different States as well as among the groups of people for whom such tours are held. Essentially, of course, such tours are for the benefit of farmers. However, shortage of time on the part of State farm-management specialists limits the number of such tours that can be held by specialists themselves. Therefore, in addition to tours for farmers on a county, area, and occasionally a State-wide basis, farm-management specialists conducted numerous tours during 1938 for the benefit of other agency personnel and other groups who in turn could service more adequately individual farmers or groups of farmers as a result of such experience.

The following farm-management tours were among those conducted during 1938 by farm-management extension specialists with groups other than primarily farmer groups:

1. County extension workers in groups.
2. College short-course students.
3. Participants in farmer-manufacturer conferences.
4. Other college extension workers, and workers of other agencies such as Soil Conservation Service, Farm Credit Administration, Agricultural Adjustment Administration, Farm Security Administration, vocational teachers, and others.
5. Professional farm managers.

Brief reference has been made to farm-management tours on the local level primarily for farmers in preceding references to work in Illinois and Minnesota.

The following statement from Indiana in somewhat more detail outlines such a tour on the State level wherein both farmers and professional workers participated:

"State farm-management tour.--Five hundred people from approximately half the counties of Indiana and from two other States attended the fourth annual farm-management tour. This tour was conducted cooperatively, as usual, by the Indiana Farm Management Association and the Farm Management Department. Four well-balanced, successfully operated farms were visited in Shelby, Rush,

and Fayette Counties. At each of the farms, the operators told in their own words over a public address system the practices that they followed in making their farm operations so successful.

"The evening preceding the tour, a farm-management banquet was held at the Brown County State Park with an attendance of 110 farmers, farm managers, and others interested in farming from all parts of the State. The following subjects were discussed:

The present real-estate situation. - M. L. Hall, of Indianapolis.

Report of the Summer Meeting of the American Society of Farm Managers. - F. E. Elliott, of Oxford, Ind.

The New Farm Tenancy Bill. - Prof. O. G. Lloyd, Purdue University, La Fayette, Ind.

Price Trends. - Dr. E. C. Young, Purdue University, La Fayette, Ind.

The Lamb and Cattle Situation. - Howard Haldeman, of Wabash, Ind.

"The first of the four farms visited on the tour was the Hamilton County farm of 218 acres, which had been operated by hired labor for the past 19 years, and which was under the management of Ernest Thornburg, president of the Indiana Farm-Management Association. The farm was divided into six fields, and a rotation of corn, wheat, and clover was followed. Mr. Thornburg had found that the carrying capacity of the farm consisted of 10 brood sows, 8 to 10 Holstein cows, a general flock of 20 ewes, and 60 hens. A 2-litter hog system was followed with Poland China sows being crossed with Duroc sires. Shoats were purchased from time to time. Heifer calves from the dairy cattle were used to replace individuals in the herd or were marketed whenever possible. The sheep were handled as a general farm flock to clean up weeds and roughage on the farm. No tractor was used, the power being supplied by 6 horses.

"The second stop was at the 180-acre Swain farm, which was also managed by Mr. Thornburg and operated by Grover Mohr under a livestock partnership agreement. Here again a 3-year rotation of corn, wheat, and either clover or alfalfa was followed. Ten Hampshire sows farrowed 2 litters a year, and some shoats were bought in addition, depending on the feed conditions. Eight Milking Shorthorns produced young stock which was fattened out and sold at 1 to 1½ years of age. No tractor was used on this farm, the power being provided by 6 horses. A few colts were raised either for market or replacements.

"Dinner was served at the Rushville Memorial Park by the Rush County Home Economics Club. A short program followed the luncheon, and music was furnished by the local township farm bureau.

"The third farm stop was at the Mahoning Valley Farm of 270 acres owned and operated by Allen Blackledge. Here a rotation of corn, corn, wheat, and clover had proved satisfactory. Cattle feeding and hog production were the

main enterprises carried on by Mr. Blacklidge. Mr. Blacklidge feels that his success with the hog enterprise embodies two main principles: Keeping the animals on clean ground, and pushing the market animals for market as fast as possible.

"The fourth stop was at the Lee Florea farm in Fayette County. This 290-acre farm is owned by Frank Florea, father of Lee B. Florea, operator of the farm. The livestock here consisted of 10 Shorthorn cows, 30 brood sows, and a breeding flock of 20 ewes. The rotation consisted of 50 acres of permanent pasture, 75 acres of corn, 75 acres of wheat and oats, and 75 acres of clover and alfalfa. Hogs were the major source of income and are produced under the 2-litter system through the use of portable equipment and the strictest sanitation practices.

"This State farm-management tour has offered the opportunity to present good farm-management practices and to bring together during the middle of the year those most vitally interested in farm-management problems. Most of the commercial farm managers of the State have attended these tours each year. They likewise serve as the basis for a certain amount of publicity to interest farmers in keeping accounts and studying their farm business.

"The program committee consisted of:

H. H. Halderman, Halderman Farm-Management Service.
J. C. Bottum, Farm-Management Department.
Ernest Thornburg, president of the Indiana Farm-
Management Association.
O. G. Lloyd, secretary-treasurer, Indiana Farm-
Management Association.
E. F. Brown, Rush County agricultural agent.
D. S. Bishopp, Fayette County agricultural agent.
W. W. Whitehead, Shelby County agricultural agent
in 1938.
Forrest Modisett, farmer, Indiana Farm-Management
Association.
Ed. S. Frazee, farmer, Rush County Farm-Management
Committee."

General Meetings

One of the effective teaching methods used by the farm-management specialists involved is that of general meetings with farmers where farm-management problems are considered. The amount of detailed work concerned precludes rendering direct assistance to all interested farmers with their farm-management problems through record projects as outlined in the preceding pages. Such meetings provide a means of contact on a practical basis with those farmers who cannot be serviced in the more detailed way. This type of work is carried to a greater or less degree in all States. In addition, materials provided through the farm-record projects are used as a basis for many discussions at farmer meetings of the institute character where many

types of problems are considered, at service-club meetings, and at meetings of many other types.

Wisconsin submits the following statement apropos this type of work:

"Farm-management principles were discussed at many meetings using results of farm records to show the effect of the factors that made for the success on farms throughout the State. Such meetings were held with county agents at their request in as many counties as time would permit. Many times such meetings were held along with an extension worker in some other field such as soils, poultry, animal husbandry, and agronomy. This type of meeting gives the farmer a basis for working out his farm plans through the closer coordination of the different farm enterprises. It shows him the interrelationship of the different enterprises and the effect they have on the farm income. It is through these meetings that several farmers see the necessity of keeping farm accounts in order to find the weaknesses in their farm business."

Use of the Press and Radio

The services of the press also are used rather liberally in getting farm-management teaching material before farm people and others. Editors of farm papers usually are receptive to printing the basic material from reports of farm-business studies based on farm records as prepared by farm-management specialists, as well as analyses of successful individual farm businesses such as those visited on farm-management tours. Extension specialists in the States endeavor to provide such material both to the strictly farm papers and to the rural press in general. The Nebraska farm-management project leader makes this comment: "The press was also used to an appreciable extent in disseminating some of the findings of the farm-account records. Through the extension editor, a schedule of press releases was made for different times throughout the year and at such times, among other topics, data from farm records were shown. These releases reached the county press, the daily press, and farm papers."

Likewise, effective use is made of the radio in disseminating farm-management information. In Illinois, where the economics department participates in a college radio program each Friday, there was a broadcast on some phase of farm management approximately once each month. Similarly, in Iowa, one of the farm-management field men reported 12 farm-management radio talks over a local station of wide coverage during the course of the year. Many other specific examples could be cited.

Farm Tenancy

Since to a considerable degree extension work done in the field of farm tenancy involves farm-management problems, or is closely allied thereto, extension work in the farm-tenancy field is included in this summary. In all these States extension workers in farm management are giving considerable time and attention to farm-tenancy problems. In several instances specific work involves the development of improved leasing forms, conducting educational programs pertaining to the advantages of such forms, and the dissemination of

lease forms in various ways. In most States individual assistance is rendered to landlords and tenants in working out equitable leasing arrangements that will tend to promote good farm management and fair treatment to each of the parties concerned. Such work is done through individual conferences, by correspondence, and through and with county agricultural agents in various ways.

For a better understanding of the elements of a satisfactory lease form and to encourage its adoption, a few States have endeavored to get improved lease forms prepared by extension staff members into the hands of agencies which may be influential in encouraging their adoption or directly instrumental in effectively getting them into use. For instance the Iowa Extension Service in cooperation with the Iowa Experiment Station prepared an improved lease form-- "The Iowa farm lease, cash or crop-share," along with a 4-page statement of principles involved and suggestions for its use. Arrangements were made with the Farm Security Administration for the use of this lease on appropriate occasions, and 7,000 copies were furnished this organization.

Nearly 7,000 additional copies were provided other agencies and individuals in a position to further the adoption of this form, and an additional 6,000 were sold to these same agencies and individuals for a sufficient amount to cover the cost of printing.

Iowa reports "Wide publicity was given to the new lease in local papers, in local and national farm magazines, and received favorable editorial comments from a number of sources. Requests for sample copies from farmers, land-owners, and other individuals have been numerous, and they have come from a large number of States."

Minnesota has developed an organized educational program on the problems of farm tenancy with particular reference to satisfactory leasing arrangements. This work centers around an appraisal by local county committees of the problems involved with the recommendations developed given wide publicity by extension workers through every effective means. To supplement this activity and to provide a ready source of pertinent information bearing upon the problems involved, a special bulletin on farm tenancy and farm leasing was prepared. /11

A different approach to this set of problems is reported by Illinois.

"Seventeen and one-half days were devoted to county-wide meetings where landlords and tenants came together to discuss tenancy problems and remedies. These meetings were held in 19 counties, and were attended by 500 farmers. Meetings of this kind indicate that Illinois farmers are not so much concerned with elimination of tenancy as with improving the landlord-tenant relationship. They feel that tenancy has its place in the agricultural program in Illinois, that place being one step in the ladder toward farm ownership. These leaders, however, recognized the necessity of making some changes in leases and in the understanding of both landlords and tenants concerning the type of land use

/11 McNulty, J. B. Farm tenancy and leasing. Minn. Univ. Agr. Ext. Bul. 188, 24 pp., illus. University Farm, St. Paul, 1938.

which is associated with maximum farm income and soil conservation. Many of the farm advisers are aware of the difficulty in contacting those landlords who live outside the county, and a project which is specifically designed to reach these people is badly needed under Corn Belt conditions."

Farm- and Home-Management Work

During recent years considerable emphasis has been placed on the consideration of home financial problems along with the business side of farming. Although movement in this direction in the extension programs had been under way for some time in several States, it was given much acceleration by the activities of the Farm Security Administration in their development of farm and home plans in connection with their loan program.

For several years in those States where a home-management specialist was employed, an effort was made to correlate the activities of the farm- and home-management specialists. In many instances farm records and home records on the same farms were encouraged by these specialists, and attempts were made to correlate the educational programs based on such records. For instance in Kansas in the association work conducted there, farmers' wives were encouraged to keep home records to be summarized and analyzed along with the farm records. In fact the associations in that State have been known as the farm- and home-management associations. Both the farm-management and home-management specialists assisted with developing the work and conducting educational meetings.

Nebraska and Wisconsin both report organized extension activities involving farm and home management under the leadership of the specialists in these two fields. Wisconsin reports:

"County farm- and home-planning phase of the farm-management project was carried on in several counties, and already more demand for such meetings has been received * * *.

"Plans have been made to spend 2 of the next 6 months in cooperation with the home-economics section in discussion meetings on farm and home plans. These farm- and home-planning meetings are now scheduled in four counties -- Wood, Marathon, Barron, and Polk. The meetings are in cooperation with the home economics extension division. Plans are made to use the homemaker groups as the basis for these meetings. There are 600 to 1,400 farm women enrolled in these groups in the different counties. They are asked to bring their husbands; the county agent also sends them an announcement of the meetings. Four or five group meetings are planned in each of the counties, and each group is to meet twice. At the first meeting farm-management principles and factors that point the way toward larger labor incomes will be discussed. The effect of the different factors on net farm income is discussed in connection with other facts brought out by the farm records and from county surveys. The purpose of such discussions is to show how to detect the weakness in one's farm business.

"The home-management specialist discusses the wise expenditure of the money in the home and emphasizes the importance of a good garden and other farm-produced products in cutting down the cash outlay for food.

"At the second meeting, a method of working out a farm and home plan in order to make for larger net incomes will be discussed."

Farm Management for Older Youth Groups

Likewise an increasing amount of time and energy during 1938 was directed toward educating the older youth concerning farm-management problems. This age group provides a peculiarly fertile field for accomplishment in farm-management educational work, since, in most instances, they have not made long-time financial commitments which will unduly influence their future progress, and they are at the age when they are considering numerous practical questions concerning the farming business, answers to which cannot be derived from their own personal experience. At the same time, the job of reaching this age group in an effective manner has been somewhat difficult, since in many instances they do not have a uniform group of interests of a specific nature to provide an effective point of approach for an educational endeavor.

However, most of the State farm-management workers have been attempting to service this age group in one way or another. The following two illustrations indicate the procedures used in two different States:

Minnesota.--"The development of the rural-youth project, in its relation to subject-matter specialists, has gone on with considerable effectiveness during the year. In the fall of 1937, a local-leader type of approach was worked out in cooperation with the rural-youth specialist, with this specialist and the home-management specialist supplying the subject-matter teaching. Two boys and two girls from each of seven counties were met at Owatonna once a month for 5 months, and then these young people took the material back home for use in the coming monthly meetings of their respective counties.

"During the fall and winter of 1938 this plan was extended, bringing in a number of specialists and a much larger number of counties. The farm-management specialist is meeting two such groups, one at Aitkin, covering four counties -- Aitkin, Carlton, Crow Wing, and Itasca; and one at Detroit Lakes, reaching Clay, Mahnomen, E. Polk, and W. Otter Tail Counties. In each case, two boys and two girls come, the boys receiving instruction in farm management and the girls in some phase of home management.

"In this rural-youth work, the following series of five lessons on farm management was used: First meeting, choice of crops; second meeting, crop rotation; third meeting, livestock organization; fourth meeting, farm records; fifth meeting, power and equipment. Thus far the program has worked out satisfactorily. Reports indicate that the boys are apparently having success in the relaying of their material to the groups in their home counties.

"Another aspect of the rural-youth work was a series of institutes held in January and February 1938. Three such institutes were held, one each in Cottonwood, Brown, and Goodhue Counties, with four or five specialists assisting. Each institute covered 3 days, the farm-management specialist being present during the second and third day in each case. A series of farm-management topics was presented to the boys at the same time that the girls

were receiving instruction in other phases of the work. The object of these meetings was to reach young men and women, both those already engaged in farming or homemaking and those expecting to be so engaged soon. In each case the county youth group was active in promoting the institute, partly for their own welfare, and partly to reach other young people not yet affiliated with the movement. These counties were not among those who had participated in the local-leader type of study. A similar series of institutes is planned for February 1939."

Iowa.--"Five rural-youth programs included some farm-management work during the winter. At these meetings, Mr. Fish and Mr. Macy presented some of the fundamental farm-management problems which young men and women between the ages of 18 and 25 were apt to be facing. These topics included: (1) Is this a good time to start farming? (2) What are the characteristics of a successful farmer, and do I have them? (3) Do I want to be a farmer? (4) What size of farm pays best? (5) Where would I like to locate if I did farm? (6) Should I use horses or tractors? (7) What are the seasonal trends of prices for hogs and butterfat?

"These various points were usually raised in question form through discussion with the young men and women attending. The use of some of our mimeographed farm-management material, together with charts and discussions from the floor seemed to be very successful in arousing their interest in the problems and in the discussions.

"The project seems to be very worth while from the viewpoint of the use of our extension men in presenting educational material, but is somewhat inefficient because of the time schedule of the program."

Table 9.--Statistical information on farm records, individual farm planning, and other selected items relating to agricultural economics, as reported by Extension agents /1 - Central States - 1938

Item	Total, Central States
Farm records:	
Days devoted to project by agents and specialists.....	6,859
Communities in which work was conducted.....	6,039
Voluntary local leaders or committeemen assisting.....	3,060
Days of assistance rendered by leaders or committeemen.....	15,747
Adult result demonstrations conducted.....	1,119
Meetings at result demonstrations.....	124
Method-demonstrations meetings held.....	634
Other meetings held.....	1,317
News stories published.....	2,984
Different circular letters issued.....	2,597
Farm or home visits made.....	12,209
Office calls received.....	37,728
Junior projects completed.....	1,435
Individual farm planning:	
Days devoted to project by agents and specialists.....	2,961
Communities in which work was conducted.....	2,761
Voluntary local leaders or committeemen assisting.....	1,335
Days of assistance rendered by leaders or committeemen.....	1,873
Adult result demonstrations conducted.....	200
Meetings at result demonstrations.....	74
Method-demonstrations meetings held.....	139
Other meetings held.....	637
News stories published.....	753
Different circular letters issued.....	382
Farm or home visits made.....	3,484
Office calls received.....	36,055
Junior projects completed.....	3
Farmers:	
Keeping regular farm accounts.....	20,454
Keeping A. A. A. farm accounts.....	15,201
Assisted in summarizing and interpreting their accounts.....	11,771
Assisted in making inventory or credit statements.....	11,142
Farm business or enterprise-survey records taken.....	4,921
Farmers:	
Advised relative to leases.....	14,264
Keeping cost-of-production records.....	5,564
/1 Data provided by Surveys and Reports Section, Division of Field Coordination, Extension Service.	

Table 10.--Statistical summary of selected items pertaining to farm record and farm-planning work as reported by State farm-management specialists - Central States - 1938

	Number
Farm management associations:	
Associations.....	13
Cooperators.....	2,195
Extension farm business records (adults):	
Farm record books distributed <u>/1</u>	61,151
Completed books summarized <u>/2</u>	13,651
Counties cooperating <u>/3</u>	613
Extension farm business records (4-H):	
Records completed in 1937 <u>/3</u>	873
Records started in 1938 <u>/3</u>	1,921
Farm records in public schools:	
Record books provided.....	11,202
Special classroom forms provided.....	6,324
Enterprise records:	
Enterprises involved in separate States <u>/4</u>	17
Enterprise records summarized <u>/4</u>	1,784
Individual farm-planning forms distributed:.....	12,038

/1 Association members excluded.

/2 Summarization work done by the Extension Service, by the Experiment Station, or jointly.

/3 10 States reporting on these items.

/4 11 States reporting on these items.

